

Amendments to the Claims:

Please amend the claims as shown. Applicants reserve the right to pursue any cancelled claims at a later date.

1 – 7 (cancelled)

8. (new) A method for packeting time-synchronous data during a transmission in a packet data network having a plurality of links, comprising:

- recurrently transmitting a plurality of data packets of the links in a period duration;
- selecting a plurality of start time of data transmission of the links so that the data packets of the links substantially evenly distribute with respect to time;
- dividing a time interval corresponding to the period duration into a plurality of equally sized time slots corresponding to a plurality of possible links;
- permanently assigning one of the time slots to one of the possible links;
- selecting a start time of a data transmission of a new link so that a new data packet of the new link is inserted into the one permanently assigned time slot corresponding to the one possible link; and
- selecting a largest common divisor of a plurality of different packeting times as the period duration if the plurality of different packeting times are used in a transmission system.

9. (new) The method as claimed in claim 8,

- wherein when setting up the new link a plurality of time gaps between the data packets of the links are evaluated within the time interval corresponding to the period duration,
- wherein the start time of data transmission of the new link is selected so that the new data packet of the new link is inserted into a largest time gap between the data packets.

10. (new) The method as claimed in claim 9, wherein the largest time gap is divided into two equally sized parts.

11. (new) The method as claimed in claim 9, wherein the new data packet of the new link is inserted into a middle of the largest time gap between the data packets.

12. (new) The method as claimed in claim 9,
wherein the time interval corresponding to the period duration is divided into a plurality of equally sized time slots corresponding to a plurality of possible links,
wherein when setting up a new link a start time of data transmission is rounded so that the new data packet of the new link is inserted into a time slot.

13. (new) The method as claimed in claim 9,
wherein if a plurality of different packeting times are used in a system, a largest common divisor of the different packeting times is selected as the period duration and,
wherein when evaluating the time gaps between the data packets of the different links within a time interval corresponding to the period duration, links which have no data packet being transmitted in the time interval are also considered.

14. (new) The method as claimed in claim 8, wherein the links in the packet data network are time-synchronous links.

15. (new) A device for packeting time-synchronous data in a packet data network having a plurality of links, comprising:
a data packeting device for packeting a plurality of links;
a transmitter for recurrently transmitting a plurality of data packets of the links with a period duration;
a first selector for selecting a plurality of start time of data transmission of the links so that the data packets of the links substantially evenly distribute with respect to time;
a calculator for dividing a time interval corresponding to the period duration into a plurality of equally sized time slots corresponding to a plurality of possible links;
an assignment device for permanently assigning one of the time slot to one of the possible links; and

a second selector for selecting a start time of data transmission of a new link so that a new data packet of the new link is inserted into the one permanently assigned time slot corresponding to the one possible link.

16. (new) The device as claimed in claim 15,
wherein when setting up the new link a plurality of time gaps between the data packets of the links are evaluated within a time interval corresponding to the period duration,
wherein the start time of data transmission of the new link is selected so that a new data packet is inserted into a largest time gap between the data packets.

17. (new) The device as claimed in claim 15, wherein if a plurality of different packeting times are used in a transmission system, a largest common divisor of the different packeting times is selected as the period duration.

18. (new) The device as claimed in claim 15, wherein the links in the packet data network are time-synchronous links.

19. (new) A device for packeting time-synchronous data in a packet data network having a plurality of links, comprising:
a data packeting device for packeting a plurality of links;
a transmitter for periodically recurrently transmitting a plurality of data packets of the links with a period duration;
a first selector for selecting a plurality of start time of data transmission of the links so that the data packets of the links substantially evenly distribute with respect to time;
a calculator for dividing a time interval corresponding to the period duration into a plurality of equally sized time slots corresponding to a plurality of possible links;
an assignment device for permanently assigning one of the time slot to one of the possible links;

a second selector for selecting a start time of a data transmission of a new link so that a new data packet of the new link is inserted into the one permanently assigned time slot corresponding to the one possible link; and

a third selector for selecting a largest common divisor of a plurality of different packeting times as the period duration if the plurality of different packeting times are used in a transmission system.